Curriculum Vitae of Denis Volkov

http://science.jpl.nasa.gov/people/Volkov/

Education

November 18, 2004: Ph.D. in Physical Oceanography, Utrecht University (Netherlands).

May 30, 1999: M.Sc. in Hydrometeorology, Saint-Petersburg State University (Russia).

May 31, 1997: B.Sc. in Hydrometeorology, Saint-Petersburg State University (Russia).

Professional Experience

Sep 2006 – present: postdoctoral researcher at NASA Jet Propulsion Laboratory, California Institute of

Technology (Pasadena, USA).

Aug 2005 – July 2006: postdoctoral researcher at Collecte Localisation Satellite, Direction d'Océanographie

Spatiale (Toulouse, France).

Feb 2005 – July 2005: postdoctoral Marie-Curie fellow Collecte Localisation Satellite, Direction

d'Océanographie Spatiale (Toulouse, France).

June 2000 – Aug 2004: researcher in training at the Royal Netherlands Institute for Sea Research (Texel,

Netherlands).

July 1999 – Sept 1999: engineer at the Arctic and Antarctic Research Institute (S.-Petersburg, Russia).

May 1998 – Aug 1998: half-time technician at the Arctic and Antarctic Research Institute (S.-Petersburg,

Russia).

Research cruises

September 2005: International Arctic Research Centre (USA), NABOS-2005 Arctic expedition on

board icebreaker "Kapitan Dranitsyn" (Russia).

Sept – Oct 2000: R/V Pelagia (Netherlands). Research cruise along the section AR7E in the northern

North Atlantic.

July – Aug 1998: R/V Polarstern (Germany). TRANSDRIFT 5 cruise in the Laptev Sea.

July – Aug 1997: R/V Dalniye Zelentcy (Russia). Hydrographic works in the Barents Sea.

July – Aug 1996: R/V Nikolay Matusevich (Russia). Educational cruise in the Baltic Sea.

Postgraduate courses followed

September 2005: International Arctic Research Centre (USA) summer school on board icebreaker

"Kapitan Dranitsyn" (Russia).

September 2003: Summer school on physical oceanography, Les Diablerets (Switzerland).

May 2003: course "Writing in English for publication" at the Utrecht University (Netherlands).

December 2002: course "Presenting in English" at the Utrecht University (Netherlands).

February 2002: course "Regional Oceanography" at the Utrecht University (Netherlands).

September 2001: introductory course in marine sciences for Ph.D. students at the University of Bremen

(Germany).

List of publications

Volkov, D.L., G. Larnicol, and J. Dorandeu, *Improving the quality of satellite altimetry data over continental shelves*, *J. Geophys. Res.*, 112, C06020, doi:10.1029/2006JC003765, 2007.

- **Volkov D.L.** and H.M. van Aken, *Climate-related change of sea level in the extratropical North Atlantic and North Pacific in 1993-2003*, Gephys. Res. Lett., 32, L14611, doi: 10.1029/2005GL023097, 2005.
- **Volkov D.L.**, The inter-annual variability of the altimetry-derived eddy field and associated surface circulation in the North Atlantic Ocean in 1993-2001, J. Phys. Oceanography, V35, 2005.
- **Volkov D.L.**, *Monitoring the sea level and surface circulation with satellite altimetry*, Ph.D. thesis, ISBN: 90-393-3862-0, 152 pp., 2004.
- **Volkov D.L.,** *Propagating features in the eddy field of the North Atlantic Current*, Geophys. Res. Lett., 31, L24305, doi:10.1029/2004GL021401, 2004.
- **Volkov D.L.** and H.M. van Aken, *Low frequency change of sea level in the North Atlantic Ocean as observed with satellite altimetry*, in Satellite Altimetry for Geodesy, Geophysics and Oceanography Series: International association of geodesy symposia, Vol. 126, Hwang, Cheinway; Shum, C.; Li, Jiancheng (Eds.), 280 p., Springer-Verlag, 2004.
- **Volkov D.L.** and H.M. van Aken, *Annual and inter-annual variability of sea level in the northern North Atlantic Ocean*, J. Geophys. Res., 108, C6, 3204, 2003.
- Dmitrenko I.A., Gribanov V.A., **Volkov D.L.**, Kassens H., and Eicken H., *Impact of river discharge on the sea* land fast ice extension in the Russian Arctic shelf area, POAC 99, Proceedings, vol. 1, Espoo, Finland, 1999
- Dmitrenko I.A., Gribanov V.A., **Volkov D.L.**, Berezovskaya S.L. and Kassens H., *Role of river discharge in the inter-annual variability of the sea land fast ice distribution in the Russian Arctic*, Meteorolgia i Hydrologia, 2, 2000 (in Russian).

Submitted to peer-reviewed journals:

- **Volkov D.L.** and Lee-Lueng Fu, *The role of vorticity fluxes in the dynamics of the Zapiola Anticyclone*, submitted, 2008.
- Carrere L., **D.L. Volkov**, P-Y. Le Traon, P. Schaeffer, C. Boone and Y. Faugére, *Reducing the aliasing of high frequency signals in altimeter data: empirical and model-based approaches*, J. Atmos. Ocean. Tech., submitted, 2007.

Presentations at conferences/workshops/seminars

March 2008: Ocean Sciences Meeting, Orlando, Florida:

Volkov D.L. and L.-L. Fu: *The role of vorticity fluxes in the dynamics of the Zapiola Anticyclone.*

January 2006: Seminar at Jet Propulsion Laboratory, Pasadena CA:

Volkov D.L. et al. (oral): *Improving the quality of satellite altimetry data by reducing the impact of long wavelength errors.*

May 2004: Joint assembly of AGU, CGU, SEG and EEGS in Montreal (Canada).

Volkov D.L. (oral): The variability of sea level in the North Atlantic and North Pacific in 1993-2003 observed with satellite altimetry. The presentation received an Outstanding Student Paper Award.

April 2004: European Geophysical Union general assembly in Nice (France).

Volkov D.L. (oral): The comparative analysis of the sea level variability in the North Atlantic and North Pacific from 1993 to 2002.

Volkov D.L. (poster): Complex singular value decomposition analysis of eddy kinetic energy field in the North Atlantic Current.

November 2003: Buys Ballot research school symposium (the Netherlands).

Volkov D.L. (poster): Complex singular value decomposition analysis of eddy kinetic energy field in the North Atlantic Current.

September 2003: Royal Netherlands Institute for Sea Research colloquium.

Volkov D.L., H.M. van Aken (oral): *The variability of sea level and surface circulation in the North Atlantic observed with satellite altimetry.*

April 2003: European Geophysical Society – American Geophysical Union joint assembly in Nice (France). **Volkov D.L.** (oral): *Eddy field and its interannual variability in the North Atlantic Ocean as observed with satellite altimetry.*

November 2002: Buys Ballot research school symposium (the Netherlands).

Volkov D.L. (oral): Three-zoned variability in the North Atlantic Current west of the Mid-Atlantic Ridge.

September 2002: International workshop on satellite altimetry for geodesy, geophysics and oceanography in Wuhan (China).

Volkov D.L., H.M. van Aken (oral): Low-frequency change of sea level in the North Atlantic Ocean as observed by satellite altimetry.

April 2002: European Geophysical Society meeting in Nice (France).

Volkov D.L., H.M. van Aken (oral): *Annual and interannual variability of sea level in the northern North Atlantic Ocean.*

November 2001: Buys Ballot research school symposium (the Netherlands).

Volkov D.L., H.M. van Aken (oral): *Annual and interannual variability of sea level in the northern North Atlantic Ocean*

November 1999: international workshop at Arctic and Antarctic Research Institute, Saint-Petersbourg, Russia.

Dmitrenko I.A., V.A. Gribanov, **D.L. Volkov**, S.L. Berezovskaya et H. Kassens (poster): *The role of hydrometeorological factors in the interannual variations of the fast ice extent in the Laptev Sea*.

Additional information

Languages spoken: Russian (native), English (fluent), French (upper-intermediate).

Computer skills: Windows & Linux OS, Matlab, Fortran, MS Office, Surfer, Grafer and other applications.

Teaching: Physical Oceanography of the Arctic Ocean (1999, Saint-Petersburg State University, 30 hours).